

WO 03/088052

PCT/AU03/00433

- 24 -

CLAIMS:

1. A system for storing information having a predetermined use which requires said information to be secured, including:

5 a client system for generating first data and second data from said information, such that said information can be generated from said first data and said second data, and said predetermined use is infeasible with only one of said first data and said second data, and for storing an identifier with said first data; and

a remote server for storing said second data with an encoded identifier generated from said identifier.

- 10 2. A system as claimed in claim 1, wherein said remote server is adapted to send an encoded version of said second data to said client system, and said client system is adapted to generate an encoded version of said information from said first data and said encoded second data, and to store the encoded information with said identifier.

- 15 3. A system as claimed in claim 2, including a remote hash server for generating the encoded second data.

4. A system for storing information having a predetermined use which requires said information to be secured, including:

20 a client system for storing an encoded version of said information and an identifier, the encoded information having been generated from first data of said information and an encoded version of second data of said information, wherein said information can be generated from said first data and said second data, and said predetermined use is infeasible with only one of said first data and said second data; and

25 a remote server for storing said second data and an encoded identifier generated from said identifier;

wherein said client system is adapted to send at least the encoded version of the second data to said remote server.

WQ 03/088052

PCT/AU03/00433

- 25 -

5. A system as claimed in claim 4, including a plurality of said remote server, and a gateway for selecting at least one of the remote servers, and for forwarding data received from said client system to the selected at least one remote server.
6. A process for storing information having a predetermined use which requires said information to be secured, including generating first data and second data from said information, such that said information can be generated from said first data and said second data, and said predetermined use cannot be performed using only one of said first data and said second data.
7. A process as claimed in claim 6, including generating encoded data from said information, wherein said first data and second data are generated from said encoded data.
8. A process as claimed in claim 7, wherein the quantity of said encoded data is substantially larger than quantity of said information.
9. A process as claimed in claim 7, wherein said step of generating includes encrypting said information.
10. A process as claimed in claim 6, wherein said first data and said second data are stored at respective locations physically remote from one another.
11. A process as claimed in claim 6, wherein the process is executed by a client system, and the process includes:
 - 20 sending said first data and an identifier to a remote server for storage; and
 - storing said second data and said identifier.
12. A process as claimed in claim 11, wherein an encoded identifier generated from said identifier is stored with said first data.
13. A process as claimed in claim 12, wherein said encoded identifier includes a cryptographic hash of said identifier.

WO 03/088052

PCT/AU03/00433

- 26 -

14. A process as claimed in claim 13, wherein said hash is remotely generated using a hash function unknown to said client system and unknown to said remote server.

15. A process as claimed in claim 11, including:

5 receiving an encoded version of said first data from said remote server; and
generating an encoded version of said information from the encoded first data and said second data; and wherein said step of storing includes storing the encoded information and said identifier.

16. A process for storing information having a predetermined use which requires said information to be secured, including:

10 receiving an identifier and first data from a client system having second data, said first data and said second data being such that said information can be generated from said first data and said second data, and said predetermined use cannot be performed using only one of said first data and said second data; and

15 storing said first data with an encoded identifier generated from said identifier, without storing said identifier.

17. A process as claimed in claim 16, including:

generating encoded first data from said first data; and
sending said encoded first data to said client system for storage with said second data and said identifier.

20 18. A process for generating information having a predetermined use which requires said information to be secured, including:

determining, on the basis of an identifier, first data of said information;
receiving second data of said information from a remote server; and
25 generating said information from said first data and said second data, wherein said predetermined use is infeasible with only one of said first data and said second data.

WO 43/088052

PCT/AU03/00433

- 27 -

19. A process for generating information as claimed in claim 18, including sending said identifier to said remote server, and said step of receiving includes receiving, from said remote server, said second data determined on the basis of an encoded identifier generated from said identifier.
- 5 20. A process as claimed in claim 18, including using said information for said predetermined use and then discarding said information.
21. A process for generating information according to claim 20, wherein said information includes a credit card number and said predetermined use includes processing a financial transaction on the basis of said credit card number.
- 10 22. A process for generating information having a predetermined use which requires said information to be secured, including:
receiving an identifier;
determining first data of said information on the basis of said identifier; and
15 sending said first data to a client system to enable said information to be generated from said first data and second data of said information, wherein said predetermined use is infeasible with only one of said first data and said second data.
23. A process for generating information having a predetermined use which requires said information to be secured, including:
20 determining, on the basis of an identifier, an encoded version of said information, the encoded information having been generated from first data of said information and an encoded version of second data of said information; and
sending said identifier and said encoded information to a remote server for generation of said information from said first data and said second data, wherein said predetermined use is infeasible with only one of said first data and said second data.

WQ 03/088052

PCT/AU03/00433

- 28 -

24. A process for generating information having a predetermined use which requires said information to be secured, including:
- receiving an identifier and an encoded version of said information;
 - determining first data of said information on the basis of said identifier;
 - 5 generating said information from said first data and second data of the encoded information, wherein said predetermined use is infeasible with only one of said first data and said second data;
 - using said information for said predetermined use; and
 - discarding said information.
- 10 25. An information storage system having components for executing the steps of any one of claims 6 to 24.
26. A computer-readable storage medium having stored thereon program code for executing the steps of any one of claims 6 to 24.